## **CLAIMS**

What is claimed is:

An apparatus for recording data on an optical recording medium, comprising:
 a recording waveform generating unit which generates a recording waveform having an
 erase pattern containing a multi-pulse and a recording pattern containing another multi-pulse;
 and

a pickup unit which generates light to the optical recording medium according to the generated recording waveform so that a mark or a space is formed on the optical recording medium.

- 2. The apparatus of claim 1, further comprising:
- a channel modulation unit which channel modulates data provided from an outside source, and outputs an NRZI data signal to the recording waveform generating unit.
- 3. The apparatus of claim 1, wherein the pickup unit comprises:
  a motor which rotates the optical recording medium;
  an optical head having a laser device which generates a laser beam to the optical recording medium or receives the laser beam reflected from the optical recording medium; a servo circuit which servo-controls the motor and the optical head; and a laser driving circuit which drives the laser device installed in the optical head.
- 4. An apparatus for recording data on an information storage medium, comprising:
  a recording waveform generating unit which generates a recording waveform comprising
  a recording pattern, an erase pattern having a multi-pulse, and a cooling pulse concatenating
  the recording and erase patterns; and

a pickup unit which records with respect to the information storage medium according to the generated recording waveform so as to form a mark and/or a space on the information storage medium.